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## **Abstract**

The present invention relates i.a. to nucleic acid sequences encoding novel Lawsonia intracellularis proteins. It furthermore relates to DNA fragments, recombinant DNA molecules and live recombinant carriers comprising these sequences. Also it relates to host cells comprising such nucleic acid sequences, DNA fragments, recombinant DNA molecules and live recombinant carriers. Moreover, the invention relates to proteins encoded by these nucleotide sequences. The invention also relates to vaccines for combating Lawsonia intracellularis infections and methods for the preparation thereof. Finally the invention relates to diagnostic tests for the detection of Lawsonia intracellularis DNA, the detection of Lawsonia intracellularis antigens and of antibodies against Lawsonia intracellularis.